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REMARKS

In response to a final office action of May 22, 2003, Applicant's attorney's filed a response after final. Failing to receive an advisory action on this application, Applicants' filed a notice of appeal. The application was subsequently transferred to the present attorneys.

When the present attorney's attempted to file an appeal, it was noticed that the advisory action was not received for this application. Applicant's called the Examiner, who indicated that the file for this application had been marked as lost. Applicant's subsequently sought to locate the file by phoning an Examiner Weston, who indicated only that it was lost. Applicant's, thinking that the USPTO was taking action to locate the application, unfortunately let the application lapse. Applicants' hereby have filed with this response a petition to revive the application, with an RCE to allow the case to be further considered. As such, the rejection which will be responded to will be the final rejection of the May office action.

In the outstanding Official Action, the Examiner:

- (1) rejected claims 1-12 under 35 USC 102(b) as being clearly anticipated by Miller et al.; and
- (2) rejected claims 3-12 under 35 USC 103 (a) as being unpatentable over Miller et al.

In response to Item 1 above. Applicants respectfully traverse the rejection of claims 1 and 2 under 35 USC 102(b) for the following reasons.

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It is well known that in order to support a rejection under 35 U.S.C. §102, *every* limitation in the claims should be shown or described in the references. Applicant's respectfully submit that Miller, as a reference, fails to support this burden.

Independent claim 1 of the present invention comprises a wavelength reference apparatus for use in calibrating a device comprising a tunable Fabry-Perot filter or tunable VCSEL, the wavelength reference apparatus being configured to tune the device to a precise, known wavelength, the wavelength reference apparatus comprising an LED having an emission profile which varies with wavelength; and the device being swept through its tuning range by varying the tuning voltage applied to the device, the known transmission wavelengths established by the LED and the etalon are correlated to counterpart tuning voltages of the device so as to calibrate the device. An LED having an emission profile which varies with wavelength is described at page 10, line 16, through page 11, line 2 of the above-identified patent application. An example of such an emission profile is shown in Fig. 4 of the above-identified patent application.

Independent claim 2 of the present invention comprises a method for calibrating a device comprising a tunable Fabry-Perot filter or a tunable VCSEL, the wavelength reference apparatus being configured to tune the device to a precise, known wavelength, the method comprising the steps of energizing an LED so as to produce an emission of light, the LED having an emission profile which varies with wavelength, passing the light output by the LED through an etalon so as to generate a comb of known transmission peaks, with each transmission peak occurring at a precise, known wavelength; passing light from the etalon to the device, and sweeping the device through its tuning range by varying the tuning voltage applied to the device so as to correlate the known wavelength of each transmission peak and the tuning voltage associated with that wavelength so as to calibrate the device.

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Applicants believe that Miller et al. disclose a reference system for measuring wavelengths of radiation from an optical device, the system including an optical path having a reference branch and a measurement branch, and a scanner that determines unknown wavelengths of a subject light source by comparing reference signals and subject signals produced through the reference branch and the measurement branch, respectively.

Applicants believe that Miller et al. do not disclose a wavelength reference apparatus comprising an LED having an emission profile which varies with wavelength, and a detector for detecting the light emitted by the LED and passing through an etalon, wherein the known transmission wavelengths established by the LED and the etalon are correlated to counterpart tuning voltages of the device so as to calibrate the device.

Applicants believe that Miller et al. do not disclose a method for calibrating a device comprising the steps of energizing an LED so as to produce an emission of light, the LED having an emission profile which varies with wavelength, and sweeping the device through its tuning range by varying the tuning voltage applied to the device so as to correlate the known wavelength of each transmission peak and the tuning voltage associated with that wavelength so as to calibrate the device.

Applicants believe that Miller et al. teach away from the present invention in that a reference light source appears to be used in conjunction with a subject light source to produce reference signals and subject signals, and these reference signals and subject signals are used to determine the wavelength of the subject light source. *Applicants further believe that Miller et al. do not disclose the reference light source having an emission profile which varies with wavelength.* In particular, Miller states, at column 7, lines 17-20:

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“... When reference light source 8 is on, broad spectrum light from source 8 is coupled into fixed FFP filter 7 which transmits maximum light only at specific and precisely separated wavelengths...”

Thus, Miller et al. cannot teach Applicants' claimed approach for correlating transmission wavelength to tuning voltages. Accordingly, independent claims 1 and 2 are believed to be in condition for allowance, and allowance thereof is respectfully requested.

As mentioned above, claims 3-6 were rejected under 35 U.S.C. §103 as being unpatentable over Miller. The Examiner states that the substitution of the specific light sources and specific differing kinds of etalons ... is well known in the art, and it would have been obvious to one of ordinary skill in the art at the time of the invention to make the appropriate substitutions, as the substitutions would not result in any change in functionality.

Applicants submit that such a rejection is not proper. In order to support a rejection under 35 U.S.C. §103, a motivation for modifying the references must be shown or suggested by the references or art. "There are three possible sources for a motivation to combine references: the nature of the problem to be solved, the teachings of the prior art, and the knowledge of persons of ordinary skill in the art." *In re Rouffet*, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457-58 (Fed. Cir. 1998) (The combination of the references taught every element of the claimed invention, however without a motivation to combine, a rejection based on a *prima facie* case of obvious was held improper.). The level of skill in the art cannot be relied upon to provide the suggestion to combine references. *Al-Site Corp. v. VSI Int'l Inc.*, 174 F.3d 1308, 50 USPQ2d 1161 (Fed. Cir. 1999). [See M.P.E.P. §2143.1]

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A statement that modifications of the prior art to meet the claimed invention would have been "well within the ordinary skill of the art at the time the claimed invention was made" because the references relied upon teach that all aspects of the claimed invention were individually known in the art is not sufficient to establish a *prima facie* case of obviousness without some objective reason to combine the teachings of the references. *Ex parte Levingood*, 28 USPQ2d 1300 (Bd. Pat. App. & Inter. 1993). See also *In re Kotzab*, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1318 (Fed. Cir. 2000) (Court reversed obviousness rejection involving technologically simple concept because there was no finding as to the principle or specific understanding within the knowledge of a skilled artisan that would have motivated the skilled artisan to make the claimed invention); *4L-Site Corp. v. VSI Int'l Inc.*, 174 F.3d 1308, 50 USPQ2d 1161 (Fed. Cir. 1999) (The level of skill in the art cannot be relied upon to provide the suggestion to combine references.).

The proffered motivation is that 'it would not result in any change.' Applicant's submit that such a motivation is insufficient. However, even if a motivation could be made for the modifications suggested by the Examiner, claims 3-12 would still be allowable for at least the reason that they serve to further limit an independent claim which is allowable for the reasons discussed above.

Applicants have made a diligent effort to place the claims in condition for allowance. However, should there remain unresolved issues that require adverse action, it is respectfully

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requested that the Examiner telephone the undersigned, Applicants' Attorney at 978-264-6664 so that such issues may be resolved as expeditiously as possible.

For these reasons, and in view of the above amendments, this application is now considered to be in condition for allowance and such action is earnestly solicited.

Respectfully Submitted,

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Date

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